

county; hail-stones, large as hen's eggs, doing much damage to orchards and window-glass. 21st, about 4 p. m., the sixth and most destructive hail-storm of the season occurred between Centreville and Ruthsburg, Queen Anne's county, Md., coming from the east and veering to southwest. The hail-stones were as large as hen's eggs; one, weighing one-quarter of a pound, killing poultry and breaking the leg of a hog. The destruction to fruit and grass amounts to almost a total loss, while the corn is more than one-third destroyed. 21st, Oconto, Wis., severe squall, doing damage to shipping in harbor. 24th, a severe thunder-storm visited Rochester, Charlotte and Summerville, Monroe county, N. Y., during which the lightning struck several buildings, stunning and burning a number of persons. A violent rain-storm also occurred in north portion of Harford county, Md., flooding streams and carrying away bridges, horses, cattle and sheep. 25th, Omaha, Neb., a severe wind and rain-storm passed over eastern Nebraska and Kansas, blowing a hurricane at Omaha about 3:30 a. m. Two spans of the Missouri river bridge, one hundred and fifty feet each, and the stable of the Omaha Omnibus Company, were blown down. At Omaha the tornado advanced from a point a little east of north along the course of the river; it appears that the atmospheric commotion was at first high above the country, and when the sudden fall of the river embankment was reached it swooped down in its course, spread havoc in its path, and as suddenly lifted itself again above the surrounding country. One observer says he saw an immense cloud passing down the river, lifting up the water in vast quantities and whirling it around in a funnel-shape. The spans destroyed were at the eastern terminus of the bridge; the wrought iron stringers and columns of the bridge-spans were twisted and bent like so many pieces of paper and carried partly into the river and partly against the eastern embankment of the river, on the south side of the bridge. 29th, New London, lightning struck barn at Fort Trumbull, killed one horse and set barn on fire. Macon, Ga., drayman struck and two mules killed by lightning. 30th, Pittsburgh, Pa., severe wind and rain storm, during which buildings and trees were damaged. 31st, St. Louis, Mo., heavy wind and rain storm, doing considerable damage at the Arsenal. Detroit, Mich., a series of storms, of unusual violence, uprooting trees, &c. Windsor, Ont., violent wind and hail. Sandwich, Ont., tornado moving in a southeasterly direction, damaged trees, houses, &c. Toledo, heavy wind, rain and hail-storm, hail as large as pigeon's eggs; wind 36 miles per hour at 2 p. m. Collingwood, Cuyahoga Co., Ohio, new chapel totally destroyed by wind-storm. Sandusky, Ohio, a series of violent wind, rain and hail-storms visited this city; hail as large as musket balls. Cleveland, Ohio, a most severe wind and hail-storm struck city about 10 a. m., hail-stones fell as large as walnuts; trees, flagstaffs, churches, &c., were much damaged. About 11 a. m. the water rose in the Lake, at the mouth of the Cuyahoga river, about three feet, and flowed rapidly up stream, and about 4 p. m. again fell to about 40 inches below its normal height; at the government pier the total change in the water is reported to have been about seven feet. Pittsburgh, Pa., severe wind and rain-storm, damaging roofs, flooding cellars, &c. Erie, Pa., severe storm, with tremendous sea on Lake. Ypsilanti, Mich., severe storm, damage several thousand dollars. Adrian, Mich., terrific storm.

VERIFICATIONS.

Indications.—The detailed comparison of the tri-daily weather indications with the telegraphic weather reports, for the succeeding twenty-four hours, shows a general per centage of omissions of 0.5 per cent., and of verifications of 82.7 per cent. Out of 3,698 predictions, 2,260, or 60.8 per cent., have been fully verified; 680, or 18.3 per cent., have been three-fourths verified; 487, or 13.1 per cent., have been one-half verified; 178, or 4.8 per cent., have been one-fourth verified; 93, or 2.5 per cent., have failed. The percentages of verifications for the four elements have been: weather, 83.3; wind, 79.5; temperature, 87.0; barometer, 81.8. The percentages of verifications by geographical districts have been; New England, 79.8; Middle States, 82.2; South Atlantic States, 81.1; East Gulf States, 81.6; West Gulf States, 85.0; Lower Lake region, 85.8; Upper Lake region, 82.3; Tennessee and the Ohio valley, 80.9; Upper Mississippi valley, 83.2; Lower Missouri valley, 84.2.

Cautionary Signals.—During the month 38 Cautionary Signals have been displayed at stations on the Gulf and Atlantic coast, and on the Lakes. Forty instances of high winds, where no signals were displayed, have also been reported from these stations. Telegraphic communication with the North Carolina coast stations was re-established on the 16th.

NAVIGATION.

Stages of Water.—In the table on Chart III, are given the highest and lowest readings on the river gauges, for the month, from which it will be seen that a general fall has taken place in all the rivers, averaging in the Missouri, Ohio and Cumberland rivers, from two to four feet; in the Upper Mississippi from seven to thirty inches, and in the Lower Mississippi from five to fourteen feet. Occasional slight rises have occurred in consequence of heavy rains, the most marked occurring in the Upper Mississippi during the last